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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,716	07/25/2003	Kil-Soo Jung	1293.1761	9679
49455 7590 05/01/2007 STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER RUTLEDGE, AMELIA L	
			ART UNIT 2176	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/626,716

Applicant(s)

JUNG ET AL.

Examiner

Amelia Rutledge

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 52-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 52-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is responsive to communications: Amendment, filed 02/08/2007.
2. Claims 1-25 and 52-67 are pending. Claims 1, 52, and 67 are independent claims.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 1-25 and 52-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Lamkin et al. (hereinafter "Lamkin"), U.S. Pub. No. 2002/0078144, published June 2002, filed August 21, 2001.**

**Regarding independent claim 1, Lamkin teaches an interactive digital content reproducing apparatus in the form of an embedded browser coupled to a DVD storage unit, which reproduces interactive digital content from a storage medium, which comprises AV data and a markup document used for AV reproduction (p. 6 par. 108-p. 7, par. 130, especially par. 129-130). Compare to claim 1, *a data storage unit arranged to store data; and a reading unit arranged to read data from a storage medium comprising audio/video (AV) data and a markup document used to reproduce the AV data in an interactive manner.***

Lamkin teaches the playback of audio and/or video embedded within a web page (p. 4, par. 74) which contains a command program (p. 4, par. 84) and cookies (p. 11, par. 205-p. 12, par. 218). Lamkin teaches parsing the markup document and extracting the command programs by interpreting the markup structure, (p. 5, par. 86; p. 6, par. 107), which are included in the markup document. Compare to claim 1, *a presentation engine arranged to control the data storage unit according to a command program included in an input markup document.*

Lamkin teaches that the presentation engine comprises a parser for verifying a syntax of the markup document, a document object model (DOM) tree forming unit for receiving the markup document from the parser, for interpreting a structure of the markup document, and for extracting the command program included in the markup document, since Lamkin teaches an application programming interface (API) providing a common programming interface for HTML and ECMAScript, a standardized script based on JavaScript, thus facilitating the playback of AV data within a web page (p. 4, par. 73 and 74). Therefore the DOM tree forming unit is implied in the teachings of Lamkin since Lamkin teaches the use of the API reading HTML for interpreting a structure of the markup document and extracting the command program in the form of a standardized script, and a DOM tree forming unit would have been required to read the HTML and interpret the structure of the web page. Also compare to claim 1, *an interpreter for receiving the extracted command program from the DOM tree forming unit to control the data storage unit, such that transferring of information and sharing of*

*system parameters related to AV data reproduction between different markup documents are enabled in the content reproducing apparatus.*

Lamkin teaches controlling a data storage unit, which can be part of the embedded browser according to the command program (p. 6, par. 107). This abstraction layer makes it possible to map the browser into a DVD player-specific DVD navigator. Lamkin teaches controlling the DVD data storage unit included in the apparatus with commands for transferring information and sharing system parameters for AV data reproduction (p. 7, par. 129-130). Lamkin teaches that the command program to control the data storage unit is included in the markup document, because Lamkin teaches that the presentation engine of the embedded web browser parses the HTML instructions for controlling the media playback (p. 6, par. 107), and the presentation engine of the browser provides for the embedding of video within web pages (p. 6, par. 106-107). Therefore Lamkin teaches that the HTML instructions are the command program for controlling the media playback, and are included in the markup document, the HTML page.

Lamkin teaches transferring information and sharing system parameters related to AV data reproduction between different markup documents since Lamkin teaches multiple user synchronous use among multiple devices (p. 10, par. 182).

**Regarding dependent claim 2,** Lamkin teaches that the input markup document is read from the storage medium or from a remote source, via a network, since Lamkin teaches transferring information and sharing system parameters related to

Art Unit: 2176

AV data reproduction between different markup documents since Lamkin teaches multiple user synchronous use among multiple devices (p. 10, par. 182), and since Lamkin teaches controlling a data storage unit, which can be part of the embedded browser according to the command program (p. 6, par. 107).

**Regarding dependent claim 3**, Lamkin teaches that the command program is written in ECMAScript which is a standardized script based on JavaScript (p. 4, par. 73).

**Regarding dependent claim 4**, Lamkin teaches generating cookie information according to the command program and storing it in the data storage unit (p. 7, par. 129).

**Regarding dependent claim 5**, Lamkin teaches both non-volatile and volatile data storage portions for storing cookie information according to cookie storage attribute information in the command program (p. 12, par. 207-214).

**Regarding dependent claims 6 and 7**, Lamkin teaches incorporating content identification information into the cookie information, generated by fetching predetermined target information from an AV decoder, the id field from the disk title (p. 11, par. 205-206; p. 12, par. 213). Lamkin also teaches

**Regarding dependent claim 8,** Lamkin teaches a cookie manager, i.e., a decoder decoding a read content, and a command program which operates to control the data storage unit by extracting predetermined target information (p. 7, par. 132-135; p. 12, par. 207-214), and commands the generated cookie information be stored in the data storage unit (p. 11, par. 205-206).

**Regarding dependent claims 9 and 10,** Lamkin teaches a cookie which maintains the player mode for the API playback (p. 12, par. 212), therefore it is inherent in the disclosure of Lamkin that cookie information with predetermined target information in the markup document is generated since the player is contained in the markup document. Lamkin teaches receiving data from a user before the playback of the data storage unit, where cookie information with predetermined target information in the data received from the user is generated, since Lamkin teaches the use of system cookies which are automatically created and modified by the player hardware and embedded browser (p. 12, par. 207), and it is inherent in the disclosure of Lamkin that the system cookies are created in response to events on the web page created by the user in association with controlling the data storage unit, since the cookies are created in response to the events of the user accessing an internet website (p. 7, par. 129).

**Regarding dependent claims 11 and 12,** Lamkin teaches a cookie manager which operates to control the data storage unit by extracting predetermined target information (p. 7, par. 132-135). Lamkin teaches generating and modifying items of

Art Unit: 2176

cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). It is implied in the disclosure of Lamkin that the cookie manager searches for matching cookie information items and allows deletion of cookie information since Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies; compare to cookie reference command program of claim 19. Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in the player mode and the current value of the mode information (p. 7, p. 132-135).

**Regarding dependent claims 13-21**, Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in the player mode and the current value of the mode information (p. 7, p. 132-135).

**Regarding dependent claim 22**, Lamkin teaches information defining a duration of the cookie information, since Lamkin teaches a bookmark cookie which records the time position of playback (p. 12, par. 221).



**Regarding dependent claim 23**, Lamkin teaches modifying items of cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). It is implied in the disclosure of Lamkin that the cookie manager searches for matching cookie information items and allows deletion of cookie information since Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies.

**Regarding dependent claim 24**, Lamkin teaches a cookie manager which allows the presentation engine to search the data storage unit for a cookie information item and extracting predetermined target information from the cookie information item (p. 7, par. 132-135; p. 11, p. 205-206).

**Regarding dependent claim 25**, Lamkin teaches modifying items of cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). It is implied in the disclosure of Lamkin that the cookie manager searches for matching cookie information items by same name, since Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items.

**Regarding independent claim 52**, Lamkin teaches an information storage medium for use in an interactive digital content reproducing apparatus, the information storage medium comprising audio/video (AV) data; and a markup document which reproduces the AV data in an interactive manner, since Lamkin teaches an interactive digital content reproducing apparatus with an embedded browser coupled to a DVD storage unit, which reproduces interactive digital content from a storage medium, which comprises AV data and a markup document used for AV reproduction (p. 6 par. 108-p. 7, par. 130, especially par. 129-130). Lamkin teaches a media services application programming interface (API) for synchronization of media playback and media playback control via displayed html/javascript file (Abstract).

Lamkin teaches that the markup document comprises a command program which, when the information storage medium is inserted into the content reproducing apparatus, is performed by the content reproducing apparatus to control a data storage unit included in the content reproducing apparatus, such that transferring of information and sharing of system parameters related to AV data reproduction between different markup documents are enabled in the content reproducing apparatus, since Lamkin teaches the interactive playback of digital audio and/or video embedded within a web page (p. 4, par. 74) which contains a command program (p. 4, par. 84) and cookies (p. 11, par. 205-p. 12, par. 218). Lamkin teaches parsing the markup document and extracting the command programs and cookies, (p. 5, par. 86; p. 6, par. 107). Lamkin teaches controlling a data storage unit, which can be part of the embedded browser

according to the command program (p. 6, par. 107). This abstraction layer makes it possible to map the browser into a DVD player-specific DVD navigator.

Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in the player mode and the current value of the mode information (p. 7, p. 132-135). Lamkin teaches that the cookie information is modifiable (p. 12, par. 207).

**Regarding dependent claims 53-56**, claims 53-56 reflect substantially similar subject matter as claimed in claims 6, 3, 5, and 8, respectively, and are rejected along the same rationale.

**Regarding dependent claims 57-59**, Lamkin teaches that the cookie generation command program performs a control so that the content reproducing apparatus generates cookie information comprising content identification information and stores the cookie information in the data storage unit, since Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in

the player mode and the current value of the mode information (p. 7, p. 132-135).

Lamkin teaches that the cookie information is modifiable (p. 12, par. 207).

**Regarding dependent claims 60-64**, claims 60-64 are directed to substantially similar subject matter as claimed in claims 10, and 11-13, respectively, and are rejected along the same rationale.

**Regarding dependent claims 65 and 66**, Lamkin teaches a cookie manager which operates to control the data storage unit by extracting predetermined target information (p. 7, par. 132-135). Lamkin teaches generating and modifying items of cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). It is implied in the disclosure of Lamkin that the cookie manager searches for matching cookie information items and allows deletion of cookie information since Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies; compare to cookie reference command program of claim 19. Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in the player mode and the current value of the mode information (p. 7, p. 132-135).

Lamkin teaches that the cookie generation command program performs a control so that the content reproducing apparatus generates cookie information comprising content identification information and stores the cookie information in the data storage unit, since Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212).

**Regarding independent claim 67**, Lamkin teaches a program for reproducing interactive digital content in an interactive digital content reproducing apparatus including a presentation engine and a data storage unit; receiving a markup document comprising a predetermined command program; and parsing to verify a syntax of the markup document, since Lamkin teaches an interactive digital content reproducing apparatus in the form of an embedded browser coupled to a DVD storage unit, which reproduces interactive digital content from a storage medium, which comprises AV data and a markup document used for AV reproduction (p. 6 par. 108-p. 7, par. 130, especially par. 129-130). Lamkin teaches the playback of audio and/or video embedded within a web page (p. 4, par. 74) which contains a command program (p. 4, par. 84) and cookies (p. 11, par. 205-p. 12, par. 218). Lamkin teaches parsing the markup document and extracting the command programs by interpreting the markup structure, (p. 5, par. 86; p. 6, par. 107), which are included in the markup document.

Lamkin teaches extracting the command program included in the markup document by interpreting a structure of the markup document; and controlling the data storage unit included in the content reproducing apparatus, according to the command program, such that transferring of information and sharing of system parameters related to AV data reproduction between different markup documents are enabled in the content reproducing apparatus, since Lamkin teaches an application programming interface (API) providing a common programming interface for HTML and ECMAScript, a standardized script based on JavaScript, thus facilitating the playback of AV data within a web page (p. 4, par. 73 and 74). Therefore the DOM tree forming unit is implied in the teachings of Lamkin since Lamkin teaches the use of the API reading HTML for interpreting a structure of the markup document and extracting the command program in the form of a standardized script, and a DOM tree forming unit would have been required to read the HTML and interpret the structure of the web page.

Lamkin teaches controlling a data storage unit, which can be part of the embedded browser according to the command program (p. 6, par. 107). This abstraction layer makes it possible to map the browser into a DVD player-specific DVD navigator. Lamkin teaches controlling the DVD data storage unit included in the apparatus with commands for transferring information and sharing system parameters for AV data reproduction (p. 7, par. 129-130). Lamkin teaches that the command program to control the data storage unit is included in the markup document, because Lamkin teaches that the presentation engine of the embedded web browser parses the HTML instructions for controlling the media playback (p. 6, par. 107), and the

presentation engine of the browser provides for the embedding of video within web pages (p. 6, par. 106-107). Therefore Lamkin teaches that the HTML instructions are the command program for controlling the media playback, and are included in the markup document, the HTML page.

Lamkin teaches transferring information and sharing system parameters related to AV data reproduction between different markup documents since Lamkin teaches multiple user synchronous use among multiple devices (p. 10, par. 182).

### ***Response to Arguments***

Applicants' arguments filed 02/08/2007 have been fully considered but they are not persuasive.

Applicants argue that Lamkin does not teach the limitations of the independent claims which recite: *a presentation engine arranged to control the data storage unit according to a command program included in an input markup document,...and an interpreter for receiving the extracted command program included in the markup document...* (Claim 1, l. 5-6 and 14) (Remarks, p. 11-16).

Applicants' arguments filed 02/08/2007 are based on the premise that a DVD/CD player with an embedded web browser would not meet the claimed "data storage units" (Remarks, p. 11-19). It is the examiner's opinion that the premise of applicants' arguments is incorrect because, as disclosed by Lamkin, the DVD/CD player with embedded browser for storing cookie information would comprise at least primary and secondary data storage units, since DVDs were a very well known system of persistent

data storage at the time of the invention, and the embedded browser storing cookie information was also a data storage unit, since at least cookie and session data were being stored in the browser.

Further, Lamkin does disclose an interactive digital content reproducing apparatus in the form of an embedded browser coupled to a DVD storage unit, which reproduces interactive digital content from a storage medium, which comprises AV data and a markup document used for AV reproduction (p. 6 par. 108-p. 7, par. 130, especially par. 129-130). Lamkin teaches controlling the DVD data storage unit included in the apparatus with commands for transferring information and sharing system parameters for AV data reproduction (p. 7, par. 129-130). Lamkin teaches transferring information and sharing system parameters related to AV data reproduction between different markup documents (p. 10, par. 182).

In response to applicants' arguments regarding dependent claim 4, the cited portion of Lamkin (p. 7, par. 129) discloses that the embedded web browser receives cookies from the cookie manager via the cookie API, and thus generates cookie information and stores the cookie in the data storage unit, i.e., the embedded browser storing cookie information.

In response to applicants' arguments regarding dependent claims 5-7, 11-21, and 23, applicants' arguments are based on the premise that Lamkin does not disclose applicants' claimed "content reproducing apparatus" along with the claimed cookie information. The examiner respectfully disagrees, since Lamkin does disclose an interactive digital content reproducing apparatus in the form of an embedded browser



coupled to a DVD storage unit, which reproduces interactive digital content from a storage medium, which comprises AV data and a markup document used for AV reproduction (p. 6 par. 108-p. 7, par. 130, especially par. 129-130).

In response to applicants' amendments to independent claims 1 and 67, which add the limitations ...*the extracted command program included in the markup document...*(Claim 1); Lamkin explicitly teaches that the command program to control the data storage unit is included in the markup document, because Lamkin teaches that the presentation engine of the embedded web browser parses the HTML instructions for controlling the media playback (p. 6, par. 107), and the presentation engine of the browser provides for the embedding of video within web pages (p. 6, par. 106-107). Therefore Lamkin teaches that the HTML instructions are the command program for controlling the media playback, and are included in the markup document, the HTML page.

### ***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia Rutledge whose telephone number is 571-272-7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR



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